Claims

I claim:

1. A modular building system comprising:

(a) multiple modules, wherein each of said multiple modules comprise:

(i) structural steel mesh comprising a backbone and two fins;

(ii) cementitious mortar encasing said backbone and said two fins of said structural steel mesh and yielding six sides and eight edges of said module; and

(iii) indentations in said six sides and said eight edges of said cementitious mortar, exposing portions of said structural steel mesh; and

(b) metal plate connectors, wherein said metal plate connectors are welded to said exposed portions of said structural steel mesh thereby connecting adjacent modules.

2. The modular building system of claim 1, wherein said two fins of said module measure approximately 50 mm from said backbone.

3. The modular building system of claim 1, further comprising epoxy resin on said edges of said module in contact with an adjacent module.

4. A method of manufacturing modules comprising:

(a) bending opposite ends of structural steel mesh approximately ninety degrees;

(b) placing said structural steel mesh in molds;

(c) pouring cementitious mortar into said molds, and

(d) removing said molds to yield said modules.

5. The method of claim 4, wherein approximately 50 mm of each end of said structural steel mesh is bent to create fins approximately 50 mm long.

6. The method of claim 4, wherein

step (d) removing said molds to yield said modules

occurs at least twenty-four hours after

step (c) pouring said cementitious mortar into said molds.

7. The method of claim 4, further comprising:

(e) submersing said modules in water for at least thirty-six hours.

8. A method of building a structure, said method comprising:

(a) manufacturing modules comprising structural steel mesh and cementitious mortar, wherein said modules comprise indentations exposing said structural steel mesh;

(b) manufacturing a foundation comprising structural steel mesh and cementitious mortar, wherein said foundation comprises indentations exposing said structural steel mesh;

(c) connecting one row of said modules to said foundation comprising:

(i) aligning said indentation of said module with said indention of said foundation,

(ii) welding a metal plate connector to said exposed structural steel mesh of said indentations, and

(iii) filling in said indentation with cementitious mortar;

(d) connecting said modules to adjacent modules comprising:

(i) aligning said indentation of said module with said indention of said adjacent module,

(ii) welding a metal plate connector to said exposed structural steel mesh of said indentations, and

(iii) filling in said indentation with cementitious mortar;

(e) adding additional rows of modules following the method of step (d) until the desired structural height is reached; and

(f) adding a conventional roof onto the final row of modules.